

**ABSTRACT**

The invention provides bipolar articles (*e.g.*, batteries and capacitors) with new architectures and methods of making and using the same. Articles are provided with interpenetrating anode and cathode structures that allow for improved power density, and  
5 arbitrary form factors that allow for formation in substantially any desired shape. The articles are useful for embedding or integral formation in various electronic devices to provide more efficient use of space in the devices. The articles optionally include self-organizing bipolar structures.